C L A I M S

1.   A moving image coding apparatus which codes
time-series frames constituting moving image data,
characterized by comprising:

5   decomposition means for decomposing a frame into
a plurality of subbands having different frequency
components;

first extraction means for classifying the
plurality of subbands into a first group and a second
10   group and extracting, as motion compensation target
data, data of a predetermined number of upper bits of
frequency component coefficient data forming subbands
belonging to the first group;

second extraction means for extracting data of a
15   predetermined number of lower bits of each of frequency
component coefficient data forming subbands belonging
to the first group;

motion compensation means for generating motion
vector information and predicted value information on
20   the basis of motion compensation target data of a
current frame extracted by said first extraction means
and decoded data corresponding to motion compensation
target data obtained when a preceding frame is coded;

first coding means for obtaining a difference
25   value between predicted value information generated by
said motion compensation means and motion compensation
target data of the current frame and coding the

difference value and the motion vector information;

second coding means for coding, as non-motion
compensation target data, data of a predetermined
number of lower bits of each frequency component
5   coefficient data extracted by said second extraction
means and frequency component coefficient data of
subbands belonging to the second group; and

multiplexing means for multiplexing the code data
obtained by said first coding means and said second
10   coding means.

2.   The apparatus according to claim 1, characterized
in that

said decomposition means decomposes a frame into
a plurality of subbands on the basis of a discrete
15   wavelet transformation method,

the first group comprises subbands of
low-frequency components including a subband LL, and

the second group comprises subbands of frequency
components higher in frequency than the low-frequency
20   components.

3.   The apparatus according to claim 1 or 2,
characterized in that said second coding means performs
coding for each bitplane at each bit position which
represents frequency component data or for each
25   sub-bitplane.

4.   The apparatus according to claim 3, characterized
in that said second coding means includes selection

means for selecting bits in order of a least

significant bit to an upper bit as bitplanes serving as

non-coding targets, on the basis of a generated code

amount, and codes bitplanes other than the bitplanes

5   selected by the selection means.

5.   A control method for a moving image coding

apparatus which codes time-series frames constituting

moving image data, characterized by comprising:

        a decomposition step of decomposing a frame into

10   a plurality of subbands having different frequency

components;

        a first extraction step of classifying the

plurality of subbands into a first group and a second

group and extracting, as motion compensation target

15   data, data of a predetermined number of upper bits of

frequency component coefficient data forming subbands

belonging to the first group;

        a second extraction step of extracting data of a

predetermined number of lower bits of each of frequency

20   component coefficient data forming subbands belonging

to the first group;

        a motion compensation step of generating motion

vector information and predicted value information on

the basis of motion compensation target data of a

25   current frame extracted in the first extraction step

and decoded data corresponding to motion compensation

target data obtained when a preceding frame is coded;

a first coding step of obtaining a difference
value between predicted value information generated in
the motion compensation step and motion compensation
target data of the current frame and coding the
5   difference value and the motion vector information;

a second coding step of coding, as non-motion
compensation target data, data of a predetermined
number of lower bits of each frequency component
coefficient data extracted in the second extraction
10   step and frequency component coefficient data of
subbands belonging to the second group; and

a multiplexing step of multiplexing the code data
obtained in the first coding step and the second coding
step.

15   6.   A computer program which is read and executed by
a computer to function as a moving image coding
apparatus which codes time-series frames constituting
moving image data, characterized in that the computer
program functions as:

20   decomposition means for decomposing a frame into
a plurality of subbands having different frequency
components;

first extraction means for classifying the
plurality of subbands into a first group and a second
25   group and extracting, as motion compensation target
data, data of a predetermined number of upper bits of
frequency component coefficient data forming subbands

belonging to the first group;

second extraction means for extracting data of a
predetermined number of lower bits of each of frequency
component coefficient data forming subbands belonging
5   to the first group;

motion compensation means for generating motion
vector information and predicted value information on
the basis of motion compensation target data of a
current frame extracted by the first extraction means
10 and decoded data corresponding to motion compensation
target data obtained when a preceding frame is coded;

first coding means for obtaining a difference
value between predicted value information generated by
the motion compensation means and motion compensation
15 target data of the current frame and coding the
difference value and the motion vector information;

second coding means for coding, as non-motion
compensation target data, data of a predetermined
number of lower bits of each frequency component
20 coefficient data extracted by the second extraction
means and frequency component coefficient data of
subbands belonging to the second group; and

multiplexing means for multiplexing the code data
obtained by the first coding means and the second
25 coding means.

7.   A computer-readable storage medium characterized
by storing a computer program defined in claim 6.

8.   A moving image decoding apparatus which decodes
moving image data coded by a moving image coding
apparatus defined in any one of claims 1 to 4,
characterized by comprising:

5   separation means for separating code data of an
input frame into first code data and second code data
respectively corresponding to the first group and the
second group;

        first decoding means for generating decoded data

10   of the upper bits of a subband belonging to the first
group of a current frame on the basis of a difference
value and motion vector information with respect to the
predetermined upper bits of the subband belonging to
the first group of the current frame obtained by

15   decoding the separated first code data and decoded data
of the predetermined upper bits corresponding to the
first group of a preceding frame;

        second decoding means for decoding the second
code data;

20   generation means for generating decoded data
corresponding to the first group of the current frame
by combining decoded data of lower bits of the first
group obtained by said second decoding means and
decoded data of upper bits obtained by said first

25   decoding means; and

        reconstruction means for reconstructing an image
of the current frame by performing processing inverse

to said decomposition means on the basis of the decoded

data of the subband belonging to the first group which

is generated by said generation means, and the decoded

data of the subband belonging to the second group which

5   is obtained by said second decoding means.

9.   The apparatus according to claim 8, characterized

by further comprising, when a moving image decoding

apparatus defined in claim 8 decodes moving image data

coded by a moving image coding apparatus defined in

10   claim 3,

     setting means for setting a predetermined number

of code data of bitplanes, of the second code data,

which ranges from a lower bitplane to an upper bitplane,

as data other than data to be decoded.

15   10.   The apparatus according to claim 9, characterized

in that said setting means measures a time required to

reconstruct one preceding frame, and sets the number of

bitplanes as bitplanes other than bitplanes to be

decoded for each subband on the basis of the measured

20   time value.

11.   A control method for a moving image decoding

apparatus which decodes moving image data coded by a

moving image coding apparatus defined in any one of

claims 1 to 4, characterized by comprising:

25   a separation step of separating code data of an

input frame into first code data and second code data

respectively corresponding to the first group and the

second group;

a first decoding step of generating decoded data
of the upper bits of a subband belonging to the first
group of a current frame on the basis of a difference

5   value and motion vector information with respect to the
predetermined upper bits of the subband belonging to
the first group of the current frame obtained by
decoding the separated first code data and decoded data
of the predetermined upper bits corresponding to the

10   first group of a preceding frame;

a second decoding step of decoding the second
code data;

a generation step of generating decoded data
corresponding to the first group of the current frame

15   by combining decoded data of lower bits of the first
group obtained in the second decoding step and decoded
data of upper bits obtained in the first decoding step;
and

a reconstruction step of reconstructing an image

20   of the current frame by performing processing inverse
to the decomposition step on the basis of the decoded
data of the subband belonging to the first group which
is generated in the generation step, and the decoded
data of the subband belonging to the second group which

25   is obtained in the second decoding step.

12.   A computer program which is read and executed by
a computer to function as a moving image decoding

apparatus which decodes moving image data coded by a
moving image coding apparatus defined in any one of
claims 1 to 4, characterized in that the computer
program functions as:

5   separation means for separating code data of an
input frame into first code data and second code data
respectively corresponding to the first group and the
second group;

               first decoding means for generating decoded data
10   of the upper bits of a subband belonging to the first
group of a current frame on the basis of a difference
value and motion vector information with respect to the
predetermined upper bits of the subband belonging to
the first group of the current frame obtained by
15   decoding the separated first code data and decoded data
of the predetermined upper bits corresponding to the
first group of a preceding frame;

               second decoding means for decoding the second
code data;

20   generation means for generating decoded data
corresponding to the first group of the current frame
by combining decoded data of lower bits of the first
group obtained by the second decoding means and decoded
data of upper bits obtained by the first decoding
25   means; and

               reconstruction means for reconstructing an image
of the current frame by performing processing inverse

to the decomposition means on the basis of the decoded

data of the subband belonging to the first group which

is generated by the generation means, and the decoded

data of the subband belonging to the second group which

5   is obtained by the second decoding means.

13.   A computer-readable storage medium characterized

by storing a computer program defined in claim 12.

14.   A moving image coding apparatus which codes

time-series frames constituting moving image data,

10   characterized by comprising:

decomposition means for decomposing a frame into

a plurality of subbands having different frequency

components;

first extraction means for extracting data of a

15   predetermined number of upper bits of frequency

component coefficient data constituting each subband as

motion compensation target data;

second extraction means for extracting data of a

predetermined number of lower bits of the frequency

20   component coefficient data constituting each subband as

non-motion compensation target data;

motion compensation means for generating motion

vector information and predicted value information on

the basis of motion compensation target data of a

25   current frame extracted by said first extraction means

and decoded data corresponding to motion compensation

target data obtained when a preceding frame is coded;

first coding means for obtaining a difference

value between predicted value information generated by

said motion compensation means and motion compensation

target data of the current frame and coding the

5   difference value and the motion vector information;

second coding means for coding data of a

predetermined number of lower bits of each frequency

component coefficient data extracted by said second

extraction means; and

10   multiplexing means for multiplexing the code data

obtained by said first coding means and said second

coding means.

15.   The apparatus according to claim 14,

characterized in that said decomposition means

15   comprises means for decomposing a frame into a

plurality of subbands on the basis of a discrete

wavelet transformation method.

16.   The apparatus according to claim 14 or 15,

characterized in that said second coding means performs

20   coding for each bitplane at each bit position which

represents frequency component data or for each

sub-bitplane.

17.   The apparatus according to claim 16,

characterized in that said second coding means includes

25   selection means for selecting bits in order of a least

significant bit to an upper bit as bitplanes serving as

non-coding targets, on the basis of a generated code

amount, and codes bitplanes other than the bitplanes
selected by the selection means.

18. A control method for a moving image coding
apparatus which codes time-series frames constituting

5   moving image data, characterized by comprising:

a decomposition step of decomposing a frame into
a plurality of subbands having different frequency
components;

a first extraction step of extracting data of a

10 predetermined number of upper bits of frequency
component coefficient data constituting each subband as
motion compensation target data;

a second extraction step of extracting data of a
predetermined number of lower bits of the frequency

15 component coefficient data constituting each subband as
non-motion compensation target data;

a motion compensation step of generating motion
vector information and predicted value information on
the basis of motion compensation target data of a

20 current frame extracted in the first extraction step
and decoded data corresponding to motion compensation
target data obtained when a preceding frame is coded;

a first coding step of obtaining a difference
value between predicted value information generated in

25 the motion compensation step and motion compensation
target data of the current frame and coding the
difference value and the motion vector information;

a second coding step of coding data of a
predetermined number of lower bits of each frequency
component coefficient data extracted in the second
extraction step; and

5   a multiplexing step of multiplexing the code data
obtained in the first coding step and the second coding
means.

19.   A computer program which is read and executed by
a computer to function as a moving image coding

10   apparatus which codes time-series frames constituting
moving image data, characterized in that the computer
program functions as:

decomposition means for decomposing a frame into
a plurality of subbands having different frequency

15   components;

first extraction means for extracting data of a
predetermined number of upper bits of frequency
component coefficient data constituting each subband as
motion compensation target data;

20   second extraction means for extracting data of a
predetermined number of lower bits of the frequency
component coefficient data constituting each subband as
non-motion compensation target data;

motion compensation means for generating motion

25   vector information and predicted value information on
the basis of motion compensation target data of a
current frame extracted by the first extraction means

and decoded data corresponding to motion compensation target data obtained when a preceding frame is coded;

first coding means for obtaining a difference

5   value between predicted value information generated by the motion compensation means and motion compensation target data of the current frame and coding the difference value and the motion vector information;

second coding means for coding data of a predetermined number of lower bits of each frequency

10   component coefficient data extracted by the second extraction means; and

multiplexing means for multiplexing the code data obtained by the first coding means and the second coding means.

15   20.   A computer-readable storage medium characterized by storing a computer program defined in claim 19.

21.   A moving image decoding apparatus which decodes moving image data coded by a moving image coding apparatus defined in any one of claims 14 to 17,

20   characterized by comprising:

separation means for separating code data of an input frame into first code data corresponding to motion compensation target data and second code data corresponding to non-motion compensation target data;

25   first decoding means for generating decoded data of upper bits of each subband in a current frame on the basis of a difference value and motion vector

information with respect to the predetermined upper
bits of each subband in the current frame obtained by
decoding the separated first code data and decoded data
of motion compensation data in a preceding frame;

5   second decoding means for decoding the second
code data;

generation means for generating frequency
component data of each subband in the current frame by
combining the decoded data of the lower bits of each
10   subband obtained by said second decoding means and the
decoded data of the upper bits of each subband obtained
by said first decoding means; and

reconstruction means for reconstructing an image
of the current frame by performing processing inverse
15   to said decomposition means with respect to the
frequency component data of the subband generated by
said generation means.

22.   The apparatus according to claim 21,
characterized by further comprising, when a moving
20   image decoding apparatus defined in claim 21 decodes
moving image data coded by a moving image coding
apparatus defined in claim 16,

setting means for setting a predetermined number
of code data of bitplanes, of the second code data,
25   which ranges from a lower bitplane to an upper bitplane,
as data other than data to be decoded.

23.   The apparatus according to claim 22,

characterized in that said setting means increases the number of bitplanes which are not to be decoded with respect to a subband in which frequency components gradually decrease in frequency, when a time required
5   to reconstruct one preceding frame is measured, and a value of the measured time is larger than a first threshold, and decreases the number of bitplanes which are not to be decoded with respect to a subband in which frequency components gradually increase in
10 frequency, when the value of the measured time is smaller than a second threshold.

24.   A control method for a moving image decoding apparatus which decodes moving image data coded by a moving image coding apparatus defined in any one of
15 claims 14 to 17, characterized by comprising:

        a separation step of separating code data of an input frame into first code data corresponding to motion compensation target data and second code data corresponding to non-motion compensation target data;
20   a first decoding step of generating decoded data of upper bits of each subband in a current frame on the basis of a difference value and motion vector information with respect to the predetermined upper bits of each subband in the current frame obtained by
25 decoding the separated first code data and decoded data of motion compensation data in a preceding frame;

        a second decoding step of decoding the second

code data;

        a generation step of generating frequency
component data of each subband in the current frame by
combining the decoded data of the lower bits of each
5   subband obtained in the second decoding step and the
decoded data of the upper bits of each subband obtained
in the first decoding step; and

        a reconstruction step of reconstructing an image
of the current frame by performing processing inverse
10 to the decomposition step with respect to the frequency
component data of the subband generated in the
generation step.

25.   A computer program which is read and executed by
a computer to function as a moving image decoding
15 apparatus which decodes moving image data coded by a
moving image coding apparatus defined in any one of
claims 14 to 17, characterized in that the computer
program functions as:

        separation means for separating code data of an
20 input frame into first code data corresponding to
motion compensation target data and second code data
corresponding to non-motion compensation target data;

        first decoding means for generating decoded data
of upper bits of each subband in a current frame on the
25 basis of a difference value and motion vector
information with respect to the predetermined upper
bits of each subband in the current frame obtained by

decoding the separated first code data and decoded data
of motion compensation data in a preceding frame;

second decoding means for decoding the second
code data;

5   generation means for generating frequency
component data of each subband in the current frame by
combining the decoded data of the lower bits of each
subband obtained by the second decoding means and the
decoded data of the upper bits of each subband obtained
10   by the first decoding means; and

reconstruction means for reconstructing an image
of the current frame by performing processing inverse
to the decomposition means with respect to the
frequency component data of the subband generated by
15   the generation means.

26.   A computer-readable storage medium characterized
by storing a computer program defined in claim 25.

27.   A moving image coding apparatus which codes
time-series frames constituting moving image data,
20   characterized by comprising:

discrete wavelet transformation means for
obtaining information of a plurality of subbands by
performing discrete wavelet transformation for a frame;

inter-frame coding means for performing motion
25   compensation coding for a first group comprising
subbands of low-frequency components from said discrete
wavelet transformation means on the basis of decoded

data of each subband included in the first group when a
preceding frame is coded;

intra-frame coding means for performing coding
within a current frame with respect to a second group
5   comprising subbands of high-frequency components higher
in frequency than the low-frequency components; and

multiplexing means for multiplexing code data
coded by said inter-frame coding means and said
intra-frame coding means.

10   28.   A moving image coding method of coding
time-series frames constituting moving image data,
characterized by comprising:

a discrete wavelet transformation step of
obtaining information of a plurality of subbands by
15   performing discrete wavelet transformation for a frame;

an inter-frame coding step of performing motion
compensation coding for a first group comprising
subbands of low-frequency components from the discrete
wavelet transformation step on the basis of decoded
20   data of each subband included in the first group when a
preceding frame is coded;

an intra-frame coding step of performing coding
within a current frame with respect to a second group
comprising subbands of high-frequency components higher
25   in frequency than the low-frequency components; and

a multiplexing step of multiplexing code data
coded in the inter-frame coding step and the

intra-frame coding means.

29.   A moving image decoding apparatus which decodes
code data obtained by a moving image coding method
defined in claim 28, characterized by comprising:

5   separation means for separating input code data
into inter-frame code data and intra-frame code data;

        inter-frame decoding means for generating data of
a subband of a low-frequency component by decoding the
separated inter-frame code data with motion

10   compensation;

        intra-frame decoding means for generating data of
a subband of a frequency component higher in frequency
than the low-frequency component by intra-frame-coding
the separated intra-frame code data; and

15   reconstruction means for reconstructing an image
of a current frame by performing inverse discrete
wavelet transformation for the data of the subbands
obtained by said inter-frame decoding means and said
intra-frame decoding means.

20   30.   A moving image decoding method of decoding code
data obtained by a moving image coding method defined
in claim 28, characterized by comprising:

        a separation step of separating input code data
into inter-frame code data and intra-frame code data;

25   an inter-frame decoding step of generating data
of a subband of a low-frequency component by decoding
the separated inter-frame code data with motion

compensation;

an intra-frame decoding step of generating data
of a subband of a frequency component higher in
frequency than the low-frequency component by
5   intra-frame-coding the separated intra-frame code data;
and

a reconstruction step of reconstructing an image
of a current frame by performing inverse discrete
wavelet transformation for the data of the subbands
10   obtained in the inter-frame decoding step and the
intra-frame decoding step.

31. A moving image coding apparatus which codes
time-series frames constituting moving image data,
characterized by comprising:

15   decomposition means for decomposing a frame into
a plurality of subbands having different frequency
components;

first extraction means for, with a threshold set
for each subband being represented by TB, extracting
20   data of upper bits as motion compensation target data
which excludes lower TB bits of frequency component
coefficient data constituting each subband;

second extraction means for extracting data of
lower TB bits of the frequency component coefficient
25   data constituting each subband as non-motion
compensation target data;

motion compensation means for generating motion

vector information and predicted value information on

the basis of motion compensation target data of a

current frame extracted by said first extraction means

and decoded data corresponding to the motion

5   compensation target data obtained when a preceding

frame is coded;

first coding means for obtaining a difference

value between predicted value information generated by

said motion compensation means and the motion

10   compensation target data in the current frame and

coding the difference value and the motion vector

information;

second coding means for coding data of the lower

TB bits of each frequency component coefficient data

15   extracted by said second extraction means; and

multiplexing means for multiplexing code data

obtained by said first coding means and said second

coding means.

32.   The apparatus according to claim 31,

20   characterized in that said decomposition means

comprises means for decomposing a frame into a

plurality of subbands on the basis of a discrete

wavelet transformation method.

33.   The apparatus according to claim 31 or 32,

25   characterized in that said second coding means performs

coding for each bitplane at each bit position which

represents frequency component data or for each

sub-bitplane.

34.   The apparatus according to claim 33,
characterized in that said second coding means includes
selection means for selecting bits from a least
5   significant bit to an upper bit as bitplanes serving as
non-coding targets, on the basis of a generated code
amount, and codes bitplanes other than the bitplanes
selected by the selection means.

35.   The apparatus according to any one of claims 31
10   to 34, characterized in that the threshold TB set for
each subband is 0 for subbands of low-frequency
components.

36.   A control method for a moving image coding
apparatus which codes time-series frames constituting
15   moving image data, characterized by comprising:

        a decomposition step of decomposing a frame into
a plurality of subbands having different frequency
components;

        a first extraction step of, with a threshold set
20   for each subband being represented by TB, extracting
data of upper bits as motion compensation target data
which excludes lower TB bits of frequency component
coefficient data constituting each subband;

        a second extraction step of extracting data of
25   lower TB bits of the frequency component coefficient
data constituting each subband as non-motion
compensation target data;

motion compensation means for generating motion
vector information and predicted value information on
the basis of motion compensation target data of a
current frame extracted in the first extraction step
5   and decoded data corresponding to the motion
compensation target data obtained when a preceding
frame is coded;

a first coding step of obtaining a difference
value between predicted value information generated in
10 the motion compensation step and the motion
compensation target data in the current frame and
coding the difference value and the motion vector
information;

a second coding step of coding data of the lower
15 TB bits of each frequency component coefficient data
extracted in the second extraction step; and

a multiplexing step of multiplexing code data
obtained in the first coding step and the second coding
step.

20 37.   A computer program which is read and executed by
a computer to function as a moving image coding
apparatus which codes time-series frames constituting
moving image data, characterized in that the computer
program functions as:

25   decomposition means for decomposing a frame into
a plurality of subbands having different frequency
components;

first extraction means for, with a threshold set
for each subband being represented by TB, extracting
data of upper bits as motion compensation target data
which excludes lower TB bits of frequency component
5   coefficient data constituting each subband;

second extraction means for extracting data of
lower TB bits of the frequency component coefficient
data constituting each subband as non-motion
compensation target data;

10   motion compensation means for generating motion
vector information and predicted value information on
the basis of motion compensation target data of a
current frame extracted by the first extraction means
and decoded data corresponding to the motion

15   compensation target data obtained when a preceding
frame is coded;

first coding means for obtaining a difference
value between predicted value information generated by
the motion compensation means and the motion

20   compensation target data in the current frame and
coding the difference value and the motion vector
information;

second coding means for coding data of the lower
TB bits of each frequency component coefficient data

25   extracted by the second extraction means; and

multiplexing means for multiplexing code data
obtained by the first coding means and the second

coding means.

38.   A computer-readable storage medium characterized
by storing a computer program defined in claim 37.

39.   A moving image decoding apparatus which decodes

5   moving image data coded by a moving image coding
apparatus defined in any one of claims 31 to 35,
characterized by comprising:

separation means for separating code data of an
input frame into first code data corresponding to

10   motion compensation target data and second code data
corresponding to non-motion compensation target data;

first decoding means for generating decoded data
of upper bits of each subband in a current frame on the
basis of a difference value and motion vector

15   information with respect to data of the upper bits of
each subband in the current frame obtained by decoding
the separated first code data and decoded data of
motion compensation data in a preceding frame;

second decoding means for decoding the second

20   code data;

generation means for generating frequency
component data of each subband in the current frame by
combining the decoded data of the lower bits of each
subband obtained by said second decoding means and the

25   decoded data of the upper bits of each subband obtained
by said first decoding means; and

reconstruction means for reconstructing an image

of the current frame by performing processing inverse

to said decomposition means for the frequency component

data of the subband generated by said generation means.

40.   The apparatus according to claim 39,

5   characterized by further comprising, when a moving

image decoding apparatus defined in claim 39 decodes

moving image data coded by a moving image coding

apparatus defined in claim 33,

setting means for setting a predetermined number

10   of code data of bitplanes, of the second code data,

which ranges from a lower bitplane to an upper bitplane,

as data other than data to be decoded.

41.   The apparatus according to claim 40,

characterized in that said setting means increases the

15   number of bitplanes which are not to be decoded with

respect to a subband in which frequency components

gradually decrease in frequency, when a time required

to reconstruct one preceding frame is measured, and a

value of the measured time is larger than a first

20   threshold, and decreases the number of bitplanes which

are not to be decoded with respect to a subband in

which frequency components gradually increase in

frequency, when the value of the measured time is

smaller than a second threshold.

25   42.   A control method for a moving image decoding

apparatus which decodes moving image data coded by a

moving image coding apparatus defined in any one of

claims 31 to 35, characterized by comprising:

a separation step of separating code data of an
input frame into first code data corresponding to
motion compensation target data and second code data
5   corresponding to non-motion compensation target data;

a first decoding step of generating decoded data
of upper bits of each subband in a current frame on the
basis of a difference value and motion vector
information with respect to data of the upper bits of
10   each subband in the current frame obtained by decoding
the separated first code data and decoded data of
motion compensation data in a preceding frame;

a second decoding step of decoding the second
code data;

15   a generation step of generating frequency
component data of each subband in the current frame by
combining the decoded data of the lower bits of each
subband obtained in the second decoding step and the
decoded data of the upper bits of each subband obtained
20   in the first decoding step; and

a reconstruction step of reconstructing an image
of the current frame by performing processing inverse
to the decomposition step for the frequency component
data of the subband generated in the generation step.

25   43.   A computer program which is read and executed by
a computer to function as a moving image decoding
apparatus which decodes moving image data coded by a

moving image coding apparatus defined in any one of

claims 31 to 35, characterized in that the computer

program functions as:

separation means for separating code data of an

5   input frame into first code data corresponding to

motion compensation target data and second code data

corresponding to non-motion compensation target data;

first decoding means for generating decoded data

of upper bits of each subband in a current frame on the

10   basis of a difference value and motion vector

information with respect to data of the upper bits of

each subband in the current frame obtained by decoding

the separated first code data and decoded data of

motion compensation data in a preceding frame;

15   second decoding means for decoding the second

code data;

generation means for generating frequency

component data of each subband in the current frame by

combining the decoded data of the lower bits of each

20   subband obtained by the second decoding means and the

decoded data of the upper bits of each subband obtained

by the first decoding means; and

reconstruction means for reconstructing an image

of the current frame by performing processing inverse

25   to the decomposition means for the frequency component

data of the subband generated by the generation means.

44.   A computer-readable storage medium characterized

by storing a computer program defined in claim 43.